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Reexam Control No.: 90/005,369

PATENT 5-24-00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	DeGarie et al.	Examiner:	C. Upton
Patent No.	4,672,691		
Serial No.:	06/805,801	Group Art Unit:	1724
Filed:	December 6, 1995	Docket No.:	11994.5USRX
Title:	BULK VOLUME FERMENTER		

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By:
Name: James R. Chiabetta

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AMENDMENT AND RESPONSE AFTER FINAL
PURSUANT TO 37 C.F.R. §§1.550(a) AND 1.116(a)

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

In response to the Final Office Action mailed February 17, 2000 ("Final Office Action")
please amend the above-referenced application as follows:

In the Claims

Please amend the claims as follows:

17. (Once Amended) For use with a fermentation pond, a cover and gas-collection system
comprising:

Exhibit A

a gas-impermeable membrane resistant to the elements and resistant to chemical deterioration by both the contents of the pond and any biogas generated by fermentation in the pond, the membrane overlying substantially the full surface of the pond, the membrane having a layer of insulation affixed thereto,

a biogas collection conduit positioned at the surface of the pond and under the membrane,

weight means positioned so as to urge the membrane downwardly along a plurality of lines separated from each other and a plurality of rows of floats, the weight means positioned between adjacent rows of floats
so as to define channels between the lines and floats such that a major portion of biogas passes through a central region of the channels to the collection conduit,

the floats supporting off the surface of the pond the portions of the membrane adjacent the floats, to ensure that the membrane if ruptured will not sink, and

aspirating means for exhausting the gaseous contents of the collection conduit.

Remarks

The Final Office Action mailed February 17, 2000, has been received and carefully reviewed. Reconsideration and withdrawal of the rejections of the claims of the above-identified application is respectfully requested. Claim 17 has been amended. Support for all amendments is found in the specification as originally filed. Accordingly, no new subject matter has been added.

Examiner Interview

On February 22, 2000, Applicants' below-signed representative and Robert T. Edell (Reg. No. 20,187), both of the firm of Merchant & Gould P.C., conducted an in-person interview with Examiner Christopher Upton at the U.S. Patent and Trademark Office. Applicants' representatives thank Examiner Upton for his time and constructive comments.

The interview was directed to addressing the Examiner's obviousness rejections made against claims in U.S. Patent No. 4,672,691 ("the '691 patent"), the subject of the present reexamination. References discussed at the interview were U.S. Patent Nos. 4,503,988 issued to Gerber ("Gerber"); 4,438,863 issued to Wilson et al. ("Wilson"); 4,139,117 issued to Dial ("Dial"); and 3,330,118 issued to Biais ("Biais") and the Schlegel Proposal. Applicants' representatives submitted that the Examiner had not established a *prima facie* case of obviousness because, at the least, the references and skill in the art at the time of the invention provided no suggestion or motivation to combine the references as the Examiner did. Without providing support for his position, the Examiner maintained that because "insulation is well known in a variety of applications," it would be well known to use insulation as claimed in the '691 patent.

Since the Examiner's rejection is based on his personal knowledge and is unsupported by the art, Applicants' representative and the Examiner discussed the possibility of the Examiner submitting an affidavit pursuant to 37 C.F.R. §1.104(d)(2). Applicants reserve the right to request such an affidavit, however, to expedite prosecution of this application, in addition to the arguments submitted herein, included herewith is a Declaration by Claude G. DeGarie, a co-inventor of the '691 patent, attesting to the non-obviousness of the claimed invention in view of the knowledge and beliefs of those skilled in the art at the time the '691 application was filed.

Rejections Under 35 U.S.C. §103

The Examiner rejected claims 1, 3, 7, 9 and 17 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,438,863 issued to Wilson et al. ("Wilson") in view of U.S. Patent No. 3,330,118 issued to Biaisi ("Biaisi") or U.S. Patent No. 4,139, 117 issued to Dial ("Dial"). As applied to claims 1, 3, 7 and 9, this rejection is respectfully traversed.

With regard to independent claim 17, the amendment requested herein addresses the rejection. Specifically, independent claim 17 now further recites that the "weight means [are] are positioned between adjacent rows of floats." This arrangement of the floats and weight means is neither disclosed nor suggested in the cited references. Accordingly, this rejection is believed to be overcome.

With regard to independent claims 1, 3, 7 and 9, Applicants maintain traverse to the Examiner's rejection because the Examiner has not established a *prima facie* case of obviousness with the references cited. The Examiner's attention is respectfully directed to MPEP §2143 setting forth the "Basic Requirements of a *Prima Facie* Case of Obviousness":

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claims limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, not in applicant's disclosure. (Citations omitted)

MPEP §2143, 2100-111 (July 1998).

At least two of the three required criteria for a *prima facie* case of obviousness are lacking in the present rejection. Initially, Applicants note that not all limitations of the claims are taught or suggested by the cited references. For example, each of the pending claims includes "a

biogas collection conduit positioned at the surface of the pond and under the membrane,". Neither Biaisi nor Dial teach or suggest a biogas collection conduit. In Wilson, the conduit disclosed is above the cover, not "under the membrane" as recited in the present claims. Thus, this limitation of the claims is not in the prior art references. Moreover, as will be further discussed below, none of the cited references provide any motivation for combining the references as the Examiner has done. Accordingly, this rejection is traversed.

The Examiner also rejected claims 1, 4, 5, 7, 10, 11 and 17 under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 5,503,988 issued to Gerber ("Gerber") or the Schlegel Proposal in view of Biaisi or Dial. Applicants traverse this rejection.

In making this rejection the Examiner stated:

The claims differ from Gerber and Schlegel proposal in recitation of a layer of insulation. It is well known to use insulation in a variety of applications, and the insulation of a floating cover is exemplified by Biaisi and Dial. It would therefore have been an obvious addition to the covers of Gerber and the Schlegel proposal, depending on the climate in the area of installation.

Final Office Action at 2. Applicants respectfully submit that in making this rejection, the Examiner has failed to consider the claimed invention as a whole. In re Dembiczak, 50 USPQ 2d 1615, 1616 (Fed. Cir. 1999). Rather, the Examiner has used the Applicants' disclosure as a blueprint to pick and choose elements from prior art references to defeat the patentability of the claimed invention. This is contrary to well established patent law. See e.g., In re Dembiczak, 50 USPQ 2d at 1617; In re Rouffet, 47 USPQ 2d 1453, 1458 (Fed. Cir. 1998); and In re Fine, 5 USPQ 2d 1596, 1599-1600 (Fed Cir. 1988). Mere identification in the prior art of each element of a claimed invention is insufficient to establish obviousness. In re Rouffet, 47 USPQ 2d at 1457; and Arkie Lures, Inc. v. Gene Larew Tackle, Inc., 43 USPQ 2d 1294, 1297 (Fed Cir. 1997).

All claims of the present invention are directed to a "fermentation" system and all independent claims recite specific elements present in a fermentation system. However, rather than considering whether at the time the invention was made one of skill in the art would consider it obvious to provide cover insulation for a fermentation system, the Examiner has taken a position that because insulation is used in a variety of non-fermentation system applications, it would be obvious to use insulation with the fermentation system claimed. Thus, the Examiner has made a broad conclusory statement regarding the use of insulation but has failed to show why one skilled in the art would have been motivated to use insulation in the claimed system. Broad conclusory statements regarding the teaching of multiple references standing alone, are not evidence of obviousness. In re Dembiczak 50 USPQ 2d at 1617. The Examiner must specifically identify the reasons one of ordinary skill in the art would have been motivated to select the references and combine them. In re Rouffet, 47 USPQ 2d at 1457.

The final sentence in the above quote from the rejection, i.e., the reference to climate, does not cure the deficiency of the rejection. This is demonstrated by the references cited by the Examiner. That is, in contrast to the Examiner's position that it would have been obvious to add insulation to the covers of Gerber and the Schlegel Proposal, "depending on the climate in the area of the installation," the references themselves do not support this conclusion. For example, although the drawings of the Schlegel Proposal were for a facility to be built in Dubuque, Iowa, a midwestern city which has a winter and thus should "obviously" include insulation, no insulation was suggested or even mentioned. Moreover, the only patent reference of record which is directed to a fermentation system and which discloses any insulation is Wilson. But, rather than putting the insulation on the cover, Wilson puts insulation around a gas collecting pipe which is situated above the surface of the contents of the fermentation system and further omits any mention of putting insulation on the cover. Therefore, Applicants maintain that the only basis

the Examiner has for believing that the addition of insulation to the cover for a fermentation system is obvious is the applicants' disclosure. It clearly is not obvious from the prior art.

Further support for Applicants' position that the invention claimed in the '691 patent is not obvious in view of the prior art is found in the accompanying Declaration by Claude G. DeGarie ("DeGarie Dec."), a co-inventor of the '691 patent. As stated in the Declaration, Mr. DeGarie has experience in the design of potable water systems or "clean water" systems such as disclosed in Dial and anaerobic fermentation systems or "dirty water" systems such as disclosed in Wilson, Gerber and the Schlegel Proposal. See e.g., DeGarie Dec. ¶¶ 7, 9 and 12. In contrast to the Examiner's position, the use of insulation in "dirty water" systems, as claimed in the '691 patent, is not obvious merely because insulation is disclosed for use in "clean water" systems such as disclosed in Dial. See DeGarie Dec. at 13-18.

Covers for "clean water" systems such as Dial are used for different purposes than covers for "dirty water" systems. DeGarie Dec. at ¶18. For example, "clean water" systems do not generate gas. DeGarie Dec. at ¶18. In contrast, a significant amount of gas is produced by anaerobic systems and the gas must be removed quickly and without interruption. DeGarie Dec. at ¶14. At the time the '691 patent application was filed, it was believed that putting insulation on the cover of an anaerobic system would interfere with collection of the generated gas and potentially cause conditions which could destroy the cover system. DeGarie Dec. at ¶¶14 and 15.

Moreover, persons skilled in the area of anaerobic systems are not the same as those skilled in the area of potable water systems. The two industries operate under separate guidelines, each of which provide its own trade organizations, design manuals, material accreditation and material and construction testing standards. DeGarie Dec. at ¶¶16-17. Thus, there is no motivation to combine the references as the Examiner has done. Rather, the Examiner has attributed knowledge to one of skill in the art which no prior art reference of record conveys

or otherwise suggests that such knowledge existed, without the Applicants' disclosure. To do this is an inappropriate use of hindsight. In re Fine, 5 USPQ 2d at 1600. Accordingly, the Examiner's rejections of claims 1, 4, 5, 7, 10, 11 and 17 under 35 U.S.C. §103(a) are respectfully traversed.

Biais also does not render the present invention obvious. As discussed in the "Amendment Under 37 C.F.R. §1.530(d)," filed January 10, 2000, at page 10-11, Biais is directed to a completely different cover system for a completely different purpose. There is no teaching, suggestion or other motivation for one of skill in the art to look to the teaching of Biais to solve a problem in the "dirty water" area. See DeGarie Dec. at ¶ 19.

The Examiner also rejected claims 13-16 under 35 U.S.C. §103(a) as being unpatentable over the references as applied to claims 1 and 7 and further in view of Lexcan "Floating Cover and Gas Collection" communication. It is believed that the Examiner was referring to the reference listed on the Form 1449 submitted January 10, 2000, entitled "Communication to Lexcan Industrial Supply Ltd. re: Floating Cover and Gas Collection for Harnes, France with attachments, 9 pages (March 20, 1981)..." ("Lexcan"). Applicants traverse this rejection. Lexcan does not remedy the deficiencies of the references. Thus, in view of the foregoing discussions regarding independent claim 7, from which claims 13-16 depend, this rejection is believed to be moot.

Provisional Rejection under 35 U.S.C. §102(b)

The Examiner provisionally rejected claims 1-17 under 35 U.S.C. §102(b) as being anticipated by the "Preliminary Investigation into the Feasibility of Using Three Smaller BVFs vs One Larger BVF" [hereinafter "Preliminary Investigation"]. This rejection is respectfully traversed.

In making this rejection, the Examiner referred to the drawings from litigation documents numbered ADI00004044-49 and considered them as part of the Preliminary Investigation. However, these drawings were never a part of the Preliminary Investigation. The relationship of these documents to the Preliminary Investigation was explained previously in the "Amendment Under 37 C.F.R §1.530(d)" mailed January 10, 1999 ("January Amendment"), and the Declaration of Claude DeGare ("DeGare Jan. Dec."), attached thereto.

As stated in the January Amendment at page 15-16, the "Preliminary Investigation" and attached documents were provided by the Applicants to the Patent Office in the same arrangement as the documents were received by Applicants' counsel from RDO's (defendant in pending litigation) counsel for submission to the Patent Office. However, as indicated by the numbering of the documents, the drawings to which the Examiner refers were not a part of the Preliminary Investigation (i.e., Preliminary Investigation numbered ADI00003692-3717 and drawings cited by Examiner numbered ADI00004044-49). That is, The Preliminary Investigation received from RDO's counsel had attached thereto several unrelated documents which came from different locations in the documents Applicants produced to the defendants during discovery in the litigation. Therefore, for completeness, Applicants submit herewith a Supplemental Information Disclosure Statement again listing the Preliminary Investigation and including the drawings originally attached to the Preliminary Investigation. It will be appreciated that drawings provided herewith are in numerical sequence with the Preliminary Investigation (ADI00003685-3717 and drawings ADI 3718-3720).

The drawings cited by the Examiner, ADI00004044-49, were discussed in the DeGare Jan Dec. filed with the January Amendment. The following explanation is made with reference to that Declaration. By reviewing the DeGare Jan. Dec. and attached Exhibits A-1 and A-2, it will be appreciated that the drawings to which the Examiner referred are part of a document

(Exhibit A-2, ADI000004038-ADI00004061) which was attached to a cover letter (Exhibit A-1 DeGarie Jan. Dec.) which was sent to contractors as part of a request for submission of a proposal for supply and installation of the cover for a project to be built for the A.E. Staley Corporation. DeGarie Jan. Dec. at ¶¶5-10. The letters indicate that A.E. Staley Corporation was copied on the requests. DeGarie Jan. Dec. at Exhibit A-1. Thus, the drawings at issue were a request to contractors to have the cover built, not an offer for sale to A.E. Staley.

Notice of Appeal

In the event that the Examiner maintains rejection of the claims of the above-referenced application, a Notice of Appeal is timely filed herewith.

Additional Prior Art

Applicants acknowledge that the prior art discussed in the Final Office Action at page, 4, ¶ 6, do not raise a substantial new question of patentability.

Claims Allowed

Applicants note that the Examiner did not reject claims 6 and 12. As discussed at the interview, these claims are in condition for allowance.

Summary

It is respectfully submitted that each of the presently pending claims (claims 1, 3-7 and 9-17) are in condition for allowance and notification to that effect is requested.

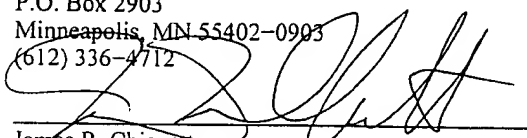
The Examiner is invited to contact Applicant's representative at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903
(612) 336-4712

DATE:

4/14/00


James R. Chiapetta
Reg. No. 39,634